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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/303,718	04/30/1999	RAMAN ARUNACHALAM	ARUNACHALAM1	8754

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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/303,718

Applicant(s)

ARUNACHALAM ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Petition decision made on 5/5/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/30/99 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Note

This office action is remailed in response to a Granted decision on 5/5/2006. The period for response will be reset to begin as of the mailing date.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 4, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, 4, 11, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claims 1, 2, and 11, the word "any" in the phrase "...processes said arrived packet in accordance with any quality of service requirement and flow specifications" render these claims indefinite. It is not clear what the processing is in accordance with.

Referring to claims 4 and 12, it is not clear what is meant by the word "propriety".

Claims 3, 5-10 and 13-15 are rejected because they are based on indefinite independent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 5, and 11, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Partridge et al (Partridge) US Patent 6,160,811.

Referring to claim 1, Partridge discloses a router with an interface means for receiving a packet (see column 5, lines 21-22, "a packet is received and buffered at the line interface to-switch unit"), means for extracting routing information (lines 23-25, "TSU abstracts the link layer data in the header"), memory means for storing said data information (lines 21-22, "a packet is received and buffered at the line interface to-switch unit"), means for processing header packet to determine a route (lines 29-32, "the forwarding engines determines the output port for the packet's next hop") and assigning packet forwarding information to the header (see column 6, line 8, "update the header), and means for retrieving data from memory locations and forwarding said data header packets to interface (see column 5, lines 40-43, "the FSU receiving the packet transmits it over the data link chosen for the next hop").

Referring to claim 11, the router cited in the rejection of claim 1 inherently includes the method of claim 11.

Referring to claim 5, Patridge discloses route look-up table for the router (see column 5, lines 29, "using perspective routing table").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patridge in view of Haddock et al. (Haddock) US Patent 6,104,700.

Referring to claim 2, Patridge discloses a router as explained in the rejection of claim 1. Patridge does not specifically disclose having a scheduler in the system. However, Haddock discloses a routing system with a scheduler to ensure the quality of service and flow specifications are followed (see figure 1 B, scheduler 170, QoS category evaluation 175). It would have been obvious to one of ordinary skills in the art to incorporate Haddock's QoS scheduler into Patridge's system because the QoS sheduler would make Patridge's system work more efficiently.

Referring to claim 16, Patridge discloses a router as explained in the rejection of claim 1. Patridge further discloses a processor for processing the packet record (see figure 3A, FSU page routing & multicast processing 165). Patridge does not specifically disclose having a

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scheduler in the system. However, Haddock discloses a routing system with a scheduler to ensure the quality of service and flow specifications are followed (see figure 1B, scheduler 170, QoS category evaluation 175). It would have been obvious to one of ordinary skills in the art to incorporate Haddock's QoS scheduler into Patridge's system because the QoS sheduler would make Patridge's system work more efficiently.

Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patridge in view of Haddock further in view of Giroux et al. (Giroux) US Patent 6,317,416 B1).

Referring to claim 3, the router is cited in the rejection of claim 2. Patridge and Haddock do not teach that the scheduler should implement fair-queuing scheduling scheme. However, Giroux discloses scheduling using weighted fair-queuing (see figure 1, WFQ 3). It would have been obvious to one of ordinary skills in the art to incorporate Giroux's method into Patridge's system because weighted fair-queuing would make Patridge's system work more efficiently and avoid congestions.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patridge.

Referring to claim 8, Patridge discloses a router as explained in the rejection of claim 1. Patridge does not specifically disclose that high speed buffer memory is used for buffer memory. However, the type of buffer memory being used is a matter of design choice. It would have been obvious to one of ordinary skills in the art to use high speed buffer memory in order to make the router work faster.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

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Rogers US Patent 6147991 discloses scalable high speed packet switch using packet diversion through dedicated channels.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Thursday from 8:30 to 4:30. The examiner can also be reached on alternate.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen

A handwritten signature in black ink, appearing to read 'Hanh Nguyen', with a stylized, cursive script.

HANH NGUYEN
PRIMARY EXAMINER